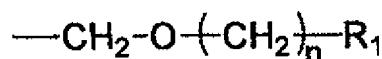


AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A polymer compound comprising:
an alkali soluble group (i), wherein
at least one hydrogen atom of the alkali soluble group (i) is substituted by an acid dissociable, dissolution inhibiting group (ii) represented by a general formula (1):



(1)

(wherein R₁ represents a cycloaliphatic group which contains no more than 20 carbon atoms and may contain an oxygen atom, a nitrogen atom, a sulfur atom, or a halogen atom, and n represents 0 or an integer of 1 to 5), wherein the cycloaliphatic group contains an adamantane backbone, and wherein

the polymer compound exhibits changed alkali solubility under the action of an acid.

2. **(Previously presented)** A polymer compound according to claim 1, wherein the alkali soluble group (i) is at least one selected from the group consisting of an alcoholic hydroxyl group, a phenolic hydroxyl group, and a carboxyl group.

3. **(Original)** A polymer compound according to claim 2, wherein a carbon atom adjacent to the carbon atom bonded to the alcoholic hydroxyl group is bonded to at least one fluorine atom.

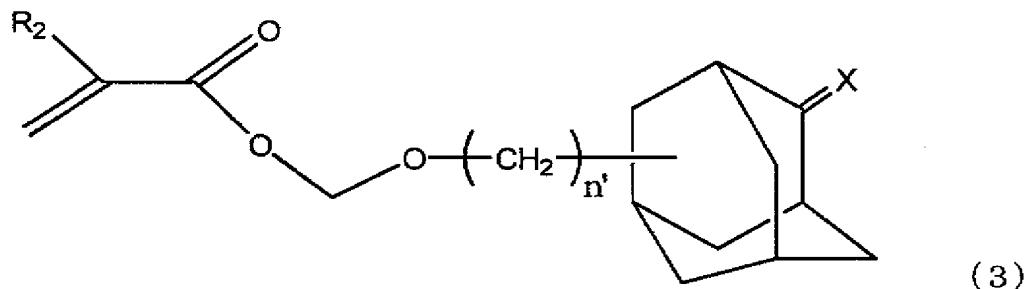
4. **(Canceled)**

5. **(Original)** A polymer compound according to claim 1, wherein R₁ represents the cycloaliphatic group containing at least one hydrophilic group.

6. (Currently amended) A polymer compound according to claim 4 5, wherein the hydrophilic group is at least one selected from the group consisting of a carbonyl group, an ester group, an alcoholic hydroxyl group, ether, an imino group, and an amino group.

7. (Cancelled)

8. (Currently amended) A compound according to claim 7, represented by a general formula (3):



(wherein R₂ represents a hydrogen atom, a fluorine atom, a lower alkyl group containing 1 to 20 carbon atoms, or a fluorinated lower alkyl group containing 1 to 20 carbon atoms, X represents two hydrogen atoms or an oxygen atom, and n' represents 0 or 1.).

9. (Cancelled)

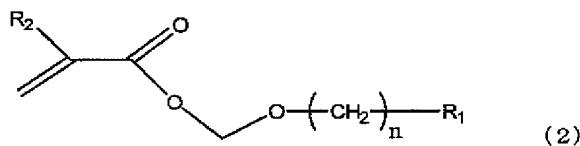
10. (Currently amended) A polymer compound according to claim 1, comprising a structural unit (a1) derived from the compound according to claim 8.

11. (Currently amended) A polymer compound according to claim 9 10, further comprising a structural unit (a3) derived from (meth)acrylate containing a lactone-containing monocyclic or polycyclic group.

12. (Original) A polymer compound according to claim 11, wherein the structural unit (a3) comprises at least two mutually different structural units derived from (meth)acrylate containing a lactone-containing monocyclic or polycyclic group.

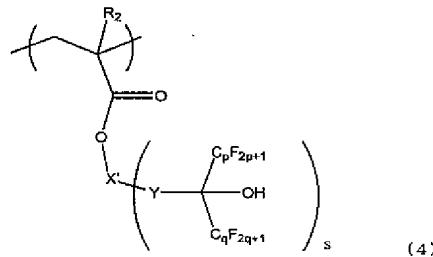
13. (Original) A polymer compound according to claim 11, further comprising a structural unit (a4) derived from (meth)acrylate containing a polar group-containing polycyclic group.

14. (Currently amended) A polymer compound according to claim 9 comprising a structural unit (1) derived from a compound represented by a general formula (2):



(wherein R₁ represents a cycloaliphatic group which contains no more than 20 carbon atoms and may contain an oxygen atom, a nitrogen atom, a sulfur atom, or a halogen atom; n represents 0 or an integer of 1 to 5; and R₂ represents a hydrogen atom, a fluorine atom, a lower alkyl group containing 1 to 20 carbon atoms, or a fluorinated lower alkyl group containing 1 to 20 carbon atoms), and

, further comprising a structural unit (a6) represented by a general formula (4):



(wherein R₂ represents a hydrogen atom, a fluorine atom, a lower alkyl group containing 1 to 20 carbon atoms, or a fluorinated lower alkyl group containing 1 to 20 carbon atoms, X' represents a divalent or trivalent cyclic group, Y represents an alkylene or alkyleneoxy group containing 1 to 6 carbon atoms which is divalent, p and q independently represent an integer of 1 to 5, and s represents an integer of 1 or 2[[.]]).

15. (Currently amended) A photoresist composition comprising:

a base material resin component (A) which exhibits changed alkali solubility under the action of an acid; and

an acid generator component (B) which generates the acid on exposure to radiation, wherein

the base material resin component (A) is the polymer compound according to any one of claim claims 1, 10 or 14.

16. (Original) A photoresist composition according to claim 15, further comprising a nitrogen-containing organic compound (D).

17. (Original) A resist pattern formation method comprising:

forming a photoresist film on a substrate using the photoresist composition according to claim 15;

exposing the photoresist film; and

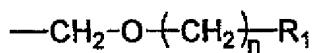
developing the exposed photoresist film to form a resist pattern.

18. (New) A polymer compound comprising:

an alkali soluble group (i), wherein

the alkali soluble group (i) is at least one of the group consisting of an alcoholic hydroxyl group and a phenolic hydroxyl group, and wherein

at least one hydrogen atom of the alkali soluble group (i) is substituted by an acid dissociable, dissolution inhibiting group (ii) represented by a general formula (1):

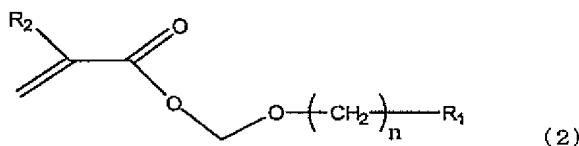


(1)

(wherein R₁ represents a cycloaliphatic group which contains no more than 20 carbon atoms and may contain an oxygen atom, a nitrogen atom, a sulfur atom, or a halogen atom, and n represents 0 or an integer of 1 to 5), and wherein

the polymer compound exhibits changed alkali solubility under the action of an acid.

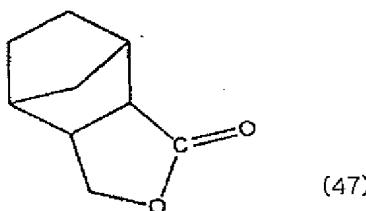
19. (New) A polymer compound comprising a structural unit (a1) derived from the compound represented by a general formula (2):



(wherein R₁ represents a cycloaliphatic group which contains no more than 20 carbon atoms and may contain an oxygen atom, a nitrogen atom, a sulfur atom, or a halogen atom; n represents 0 or an integer of 1 to 5; and R₂ represents a hydrogen atom, a fluorine atom, a lower alkyl group containing 1 to 20 carbon atoms, or a fluorinated lower alkyl group containing 1 to 20 carbon atoms.), and

a structural unit (a3) derived from (meth)acrylate containing a lactone-containing monocyclic or polycyclic group, wherein

the structural unit (a3) comprises (meth)acrylate containing a lactone-containing monocyclic group and (meth)acrylate containing a lactone-containing polycyclic group represented by a following structural formula (47).



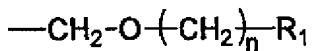
20. (New) A photoresist composition comprising:

a base material resin component (A) which exhibits changed alkali solubility under the action of an acid; and an acid generator component (B) which generates the acid on exposure to radiation, wherein the base material resin component (A) is a polymer compound comprising:

an alkali soluble group (i), wherein

the alkali soluble group (i) is at least one of the group consisting of an alcoholic hydroxyl group and a phenolic hydroxyl group, and wherein

at least one hydrogen atom of the alkali soluble group (i) is substituted by an acid dissociable, dissolution inhibiting group (ii) represented by a general formula (1):



(1)

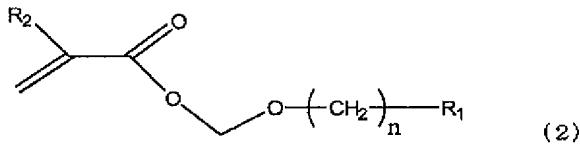
(wherein R₁ represents a cycloaliphatic group which contains no more than 20 carbon atoms and may contain an oxygen atom, a nitrogen atom, a sulfur atom, or a halogen atom, and n represents 0 or an integer of 1 to 5), and wherein

the polymer compound exhibits changed alkali solubility under the action of an acid.

21. (New) A photoresist composition comprising:

a base material resin component (A) which exhibits changed alkali solubility under the action of an acid; and an acid generator component (B) which generates the acid on exposure to radiation, wherein the base material resin component (A) is a polymer compound comprising:

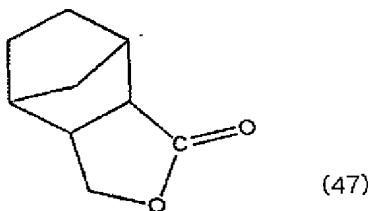
a structural unit (a1) derived from the compound represented by a general formula (2):



(wherein R₁ represents a cycloaliphatic group which contains no more than 20 carbon atoms and may contain an oxygen atom, a nitrogen atom, a sulfur atom, or a halogen atom; n represents 0 or an integer of 1 to 5; and R₂ represents a hydrogen atom, a fluorine atom, a lower alkyl group containing 1 to 20 carbon atoms, or a fluorinated lower alkyl group containing 1 to 20 carbon atoms.), and

a structural unit (a3) derived from (meth)acrylate containing a lactone-containing monocyclic or polycyclic group, wherein

the structural unit (a3) comprises (meth)acrylate containing a lactone-containing monocyclic group and (meth)acrylate containing a lactone-containing polycyclic group represented by a following structural formula (47).



22. (New) A resist pattern formation method comprising:

forming a photoresist film on a substrate using the photoresist composition according to claim 20 or 21;

exposing the photoresist film; and developing the exposed photoresist film to form a resist pattern.